ABSTRACT

A process for fluoride removal from wastewater streams produced during industrial operation for further industrial use or to comply with environmental regulations. The process segregates the removal of fluoride and fluorosilicate ions, from the totality of ions in the waste water stream, thus improving treatment efficiency and reducing costs. Ion-exchange chromatography is used to remove the fluoride and fluorosilicate ions by passing the wastewater stream through one or more columns that contain a charged resin which selectively binds cations/anions in the stream. The fluoride ions are washed from the column and then collected for removal or use in other processes.

5